

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,118	01/05/2004	Eiji Ihara	Q73832	1360
7590 01/03/2006			EXAMINER	
SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, NW			LANGEL, WAYNE A	
Washington, D			ART UNIT	PAPER NUMBER
3 ,			1754	· · · ·

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
		IHARA ET AL.				
Office Action Summary	10/751,118					
omoc Action Gammary	Examiner	Art Unit				
The MAILING DATE of this communication app	Wayne Langel	1754				
Period for Reply	ears on the cover sheet with the c	on coponacino addition				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 14 No.	ovember 2005.					
<i>;</i>	·					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ⊠ Claim(s) 1-18 is/are pending in the application. 4a) Of the above claim(s) 3-18 is/are withdrawn 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1 and 2 is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) are subject to restriction and/or	from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 09 July 2004 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	☑ accepted or b)☐ objected to b drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Professoral's Retart Province Review (PTO 948)	4) Interview Summary Paper No(s)/Mail Da					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7-9: 04 7-19-04 and 11-	5) Notice of Informal P	atent Application (PTO-152)				

Application/Control Number: 10/751,118

Art Unit: 1754

Applicants' traverse of the restriction requirement has been considered, but is not deemed persuasive. Applicants' argument, that in view of the amendments to claims 3, 9 and 11, Groups II, III and IV should be unifies as a single group for purposes of restriction because claims 9-11 depend from claim and the process defined by claims 9-11 can be carried out in series after carrying out the process according to claim 3, is not convincing, since applicants have not explained how claims 9 and 11 would require the production of abrasive grains having the limitations as recited in claim 2. Accordingly the restriction requirement is made <u>FINAL</u>.

The specification is objected to in referring to the Drawing figures as "FIG. 1" and "FIG.2", since there are no "FIG.1" and "FIG.2".

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 61-17405. The cubic boron nitride abrasive grains formed according to the process of JP 61-17405 would inherently have the properties as recited in applicant's claims 1 and 2, since the grains are formed

Application/Control Number: 10/751,118

Art Unit: 1754

by maintaining a starting mixture of a boron source and hexagonal boron nitride under pressure and temperature conditions where CBN remains thermodynamically stable. (See the English Abstract of JP 61-751118, and page 11, line 18 to page 12, line14 of applicants' specification.)

Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Otsuho '690.. The cubic boron nitride abrasive grains formed according to the process of Otsuho '690 would inherently have the properties as recited in applicant's claims 1 and 2, since the grains are formed by maintaining a starting mixture of a boron source and hexagonal boron nitride under pressure and temperature conditions where CBN remains thermodynamically stable. (See Paragraghs [0027] through [0032] of Otsuho '690, and page 11, line 18 to page 12, line14 of applicants' specification.)

Corrigan and Suzuki et al are made of record for disclosing the production of CBN abrasive grains.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Langel whose telephone number is 571-272-1353. The examiner can normally be reached on Monday through Friday, 8 am - 3:30 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/751,118 Page 4

Art Unit: 1754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wayne Langel Primary Examiner Art Unit 1754
